

WE CLAIM:

1. Inbred corn seed designated G4901, seed of that has been deposited in the ATCC accession number X.
2. A corn plant produced by the seed of Claim 1.
3. A tissue culture of regenerable cells of G4901 of Claim 1 wherein the cells of the tissue culture regenerates plants capable of expressing the all of the physiological and morphological characteristics of G4901.

- 91
-
4. (once amended) The tissue culture of regenerable cells according to Claim 3, the cells or protoplasts produced from the tissue culture, said tissue culture being selected from the group consisting of: leaves, pollen, embryos, roots, root tips, meristem, ovule, anthers, silk, flowers, kernels, ears, cobs, husks and stalks.

-
5. A corn plant capable of expressing all of the physiological and morphological characteristics of G4901 regenerated from the cells of the tissue culture of Claim 3.
 6. Hybrid seed produced by the method comprising the following steps:
 - (a) planting, in pollinating proximity, seeds of corn inbred lines G4901 which has been deposited in the ATCC accession number X and another inbred line, one of said inbred lines not releasing pollen;
 - (b) cultivating corn plants resulting from said planting;
 - (c) allowing cross pollination to occur between said inbred lines; and
 - (d) harvesting seeds produced on the non-pollen releasing inbred.
 7. Hybrid seed produced by the method comprising a hybrid combination of plants of inbred corn seed designated G4901 in Claim 1 and plants of another inbred line.

8. Hybrid plants grown from seed of Claim 7.

9. (once amended) A first generation (F1) hybrid corn plant produced by using inbred plant G4901 seed of which has been deposited in the ATCC accession number X the process of:

- a₂*
- (a) planting, in pollinating proximity, seeds of corn inbred lines G4901 and another inbred line;
 - (b) cultivating corn plants resulting from said planting;
 - (c) preventing pollen production by the plants of one of the inbred lines;
 - (d) allowing natural cross-pollination to occur between said inbred lines;
 - (e) harvesting seeds produced on plants of the inbred line of step (c); and
 - (f) growing a harvested seed of step (e).

10. (once amended) A tissue culture of regenerable cells formed from cells of the hybrid of Claim 8.

11. (once amended) A tissue culture of regenerable cells formed from cells of the hybrid of Claim 9.

12. (once amended) The plant according to Claim 2, including in the plant at least one transgenic gene.

13. A seed according to Claim 1, including at least one transgenic gene.

a₃

14. (once amended) Hybrid seed comprising at least one transgenic gene capable of being identified, said seed produced by hybrid combination of plants of inbred corn seed in Claim 13 and plants of another inbred line.

15. (once amended) The plant according to Claim 2, including in the plant at least one mutant gene.

A3

CM

16. (once amended) The seed according to Claim 1, including at least one mutant gene.

17. (once amended) Hybrid seed comprising at least one mutant gene said seed produced by hybrid combination of plants of inbred corn seed in Claim 16 and plants of another inbred line.

18. (once amended) A method of identifying the seed according to claim 1, the steps comprising: planting hybrid seed, selecting plants from the planting that appear less robust than the other plants, self-pollinating the selected plants and harvesting the resultant seed therefrom, indentifying the resultant seed as being genetically the same seed as the seed on deposit according to claim 1.

19 (newly added claim) The method of claim 18 comprising: the additional step of screening plant material derived from the selected plants or the harvested seed with biological techniques wherein identifying the seed as an inbred seed.

A4

20. (newly added claim) The pollen of the corn plant of claim 2.
